

'On the mountain, the world is still all right': Nature connections in context and the Covid journey of young adults in Austria

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Abstract

1. Research and policy during the Covid-19 pandemic often dovetailed with an established interest in how nearby urban nature spaces can encourage human well-being. Yet, to define the focus upfront in this way is to overlook the many ways in which different groups may draw on experiences in diverse natural environments to get through challenging times.
2. This paper draws on a qualitative study with 98 university students in Innsbruck, Austria. As part of a co-production approach, and using a range of exploratory and inductive methods, we examined how they coped with lockdown restrictions and other challenges to everyday life during the pandemic between March and November 2020.
3. The study's longitudinal design reveals how their nature relations evolved over the lifetime of the pandemic. Participants showed a strong identification with the Alpine nature surrounding Innsbruck and deeply mourned opportunities to go there during quarantine at the start. With the relaxation of restrictions, they briefly celebrated the return of access to these spaces before nature experiences were soon blended back into their everyday lives as before.
4. The findings present an account of nature spaces being valued during the pandemic precisely because they were away from urban spaces nearby that had come to feel strange as a result of the lockdown restrictions. This leads us to reflect on the importance of how exactly people engage with local nature and how nature connections change in response to the evolving pressures and preoccupations that shape everyday life, both for young people and others. We emphasise the value of contextual sensitivity in future research and policy hoping to foster nature benefits, both during crisis situations such as these and more generally.

KEYWORDS

crisis, inductive methods, longitudinal research, nature connections, pandemic, place, well-being, young adults

[†]Russell Hitchings died on 26 May 2024, 2 weeks after the final revisions of this article were submitted. Tabea Bork-Hüffer and Leonie Wächter deeply mourn the loss of an exceptional academic and colleague.

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1 | INTRODUCTION

There is now a large body of evidence showing that nature experiences and connections are positively linked to mental and psychological health and well-being (Barton et al., 2009; Dobson et al., 2019; McCormick, 2017; Pritchard et al., 2020; Richardson, 2022; World Health Organization Regional Office for Europe, 2016). In line with that evidence, the majority of studies conducted during the Covid-19 pandemic also suggest they were correlated with less stress, depression, anxiety and more resilience, life satisfaction and happiness at this time (Beall et al., 2022; Friedman et al., 2022; Labib et al., 2022; McCunn, 2021; Pouso et al., 2021; Soga et al., 2021; Tomasso et al., 2021; Yeung & Yu, 2022). However, nature is diverse and so are the ways people relate to it (Pohl & Helbrecht, 2022). This paper begins with the suggestion that research on pandemic nature connections can benefit from a focus on how specific groups are drawn into different ways of relating to natural environments in everyday life (Hitchings, 2013, 2021). We also contend that inductive and longitudinal methods can help by not defining the issue upfront but asking different groups, in this case young people, to narrate their own experience through participant-led methods such as written narratives and mobile instant messaging interviews (cf. Bork-Hüffer, Kulcar, et al., 2021; Brickell, Lawreniuk, et al., 2024; Kaufmann et al., 2021).

The study on which we draw to substantiate these claims involved an inductive examination of student lives and experiences during the pandemic in Innsbruck, Austria. Their everyday life changed suddenly during the pandemic with the closure of educational institutions and a shift to teaching online. In this study, we did not start with an interest in nature connections. Rather our focus was on how they experienced a variety of changes in their everyday life, and how they handled them. The students themselves brought up the importance of nature spaces. Their focus was most often on the experiences they have had, were having or might have in the future, in the mountains nearby. In this paper, we analyse how their relationships with this particular kind of nature evolved as they moved through different levels of local lockdown. This exercise encourages us to emphasise: (1) The importance of attending to the contextual specificity of how particular groups draw benefits from local nature, (2) how emotional connections to nature change in response to the evolving pressures and preoccupations that characterise the lives of young people and others and (3) the value of longitudinal and inductive methods in exploring these issues together with them.

2 | COVID-19 AND NATURE CONNECTIONS: PLACE, YOUNG PEOPLE AND TIME

2.1 | Nature experience and Covid-19: From public parks to place

There is now a large body of work on the benefits of human contact with components of the 'natural' world. Labib et al. (2022) summarise the types of spaces that have so far been considered in

one of the most comprehensive reviews of the field. They note that most research was done with samples from the Global North and that research has mostly looked into people's actual nature connections, and to a lesser extent virtual nature (Labib et al., 2022, p. 4). Yeung and Yu (2022) also argue that most research on connectedness to outdoor nature spaces has considered nearby nature, particularly greenspaces such as urban parks, as well as nearby forests. During the Covid-19 pandemic, the focus on this particular form of nature contact deepened. Here again, there was a clear emphasis on researching urban green and blue spaces (UGBS), such as urban parks, riversides or nearby spaces, partly because these were often the only accessible spaces for people under lockdown conditions (Dobson, 2021; McCunn, 2021). In this way, a pre-pandemic research focus on urban greenery and parks dovetailed with many pandemic policies in which populations were allowed to spend specific periods of time in nearby greenspace as a means of offering some respite from indoor life at home.

While fewer studies have considered the value of lockdown nature at home—often private gardens, but also indoor plants or views through windows onto greenery—these experiences were found to also be important (Labib et al., 2022; Soga et al., 2021). Furthermore, with a growing array of digital technologies, the means and varieties of virtual nature connections, for example, through accessing and sharing relevant videos or images, are increasing too (Yeung & Yu, 2022), though these may not have the same positive effects as less mediated experiences (cf. Phillips et al., 2023). In terms of the pandemic, studies have considered how people found themselves with more time and inclination to use the internet to enjoy watching what a range of animals were doing at this time (Gibbs, 2021; Turnbull et al., 2020). Some of those tasked with promoting more remote nature experiences also hustled at this time to find new ways of engaging positively with wider publics who were no longer allowed to go there (Arts et al., 2022). Other studies found that digital experiences helped those without nature access—such as health care workers—to compensate for how they had little free time to go there and were particularly strict with themselves about adhering to the rules (Labib et al., 2022).

The specifics of place-based connections to nature are less often considered in this work despite their importance in promoting health and well-being at the local level (cf., e.g. Burns, 2005; Howell & Passmore, 2013; Lengen, 2015) and the wider recognition that the natural landscapes to which people feel attached depend on their past experiences (Fornara et al., 2019). In the early pandemic, McCunn (2021, p. 223) suggested a 'goal for social scientists and urban practitioners during this crisis will be to learn how people view the ways in which public parks and wilder urban areas mitigate their response to worry, isolation, and an altered form of civic engagement' and the 'extent to which 'sense of place' changes'. Much research on natural spaces conducted during the pandemic focused on the immediate effects of policy measures on the health and well-being of local populations, with quantitative studies, especially surveys, dominating. These methods are, however, less sensitive to the complexities of how different groups drew upon 'nature' as a

resource to cope with the pandemic in ways that included, but were also about more than, immediate local provision.

2.2 | Nature, Covid-19 and young people in context

Although most research on nature connections during Covid-19 has involved adults (Labib et al., 2022, p. 4), there is now also a sizeable evidence base related to children and young people. As became clear during the first months of the pandemic, young people were physiologically less likely to be affected by the virus itself (Dhochak et al., 2020). However, this did not protect them from the mental and social challenges associated with the many uncertainties, risks and anxieties caused by the pandemic (Burton & Harwood, 2023; Germani et al., 2020; Holmes et al., 2020; Oswald et al., 2021).

Indeed, the pandemic often led to significant changes in the everyday routines for children and young people (Jaekel et al., 2021; Nenna et al., 2022; UNESCO, 2020). Due to the temporary closure of schools and universities, youth organisations, sports fields and entertainment facilities, young people's daily routines were suddenly forcibly relocated, with various levels of success, into homes. The ways in which young people already experience home life have also had impacts on how they handled lockdowns (Bork-Hüffer, Kulcar, et al., 2021; Lips, 2021). Several studies have shown how confinement increased excessive recreational time spent online during the pandemic—a problem for young people's (mental) health and well-being (Ho & Lee, 2022; Schmidt et al., 2020; Yeung & Yu, 2022). Still, social media were the only way to connect to friends and the outside world, fight isolation and find solace from stressful family relations at home (Mahlknecht et al., 2022; Peil, 2021).

The negative consequences of extended periods without nature exposure for children and young people have been emphasised by McCunn (2021) for whom this not only means they miss out on the positive health benefits during lockdowns but also that future relations are impacted since time outdoors during childhood shapes nature relations as adults. A Malaysian study by Sundara Rajoo et al. (2021) on the effect of physical exercise (in a nature setting) and nature therapy in improving mental well-being among 30 young adults (18–40 years old) during the pandemic showed reductions in stress, anxiety and depression for both interventions. In a Norwegian study of STRAVA (an app which provides internet-based route tracking and sharing of sport activities like running, swimming, riding bike, skiing or hiking) activity patterns during the pandemic, Venter et al. (2021) found that the lasting positive effects of nature contact over the short term were particularly strong for 13- to 19-year-olds, thereby underlining the importance of urban nature and open spaces for mitigating negative effects of the pandemic especially for youth.

Some have found disadvantaged young people to be especially deprived of nature contact during the pandemic. For example, Friedman et al. (2022) found that the lockdown increase in nature connections seen in their UK sample of 376 families with young children was more evident for affluent families. Meanwhile, the findings of a Canadian study on those aged between 5 and 17 years old (Mitra

et al., 2020) underline the impact of living conditions and neighbourhood, with children living in apartments being more likely to remain indoors, while the proximity of large roads and park access also had an impact on outdoor activity levels. Finally, Reed et al. (2022), drawing on an online survey of Generation Z youth in the United States ($n=116$, ages 12–17), noted that young people in disadvantaged neighbourhoods were less likely to spend beneficial time outdoors.

A few qualitative studies have delved into the imagined and actual relations between different groups of young people and nature during the pandemic. Yeung and Yu (2022) show the importance of cultural concepts of nature's capacity to enhance health among young people. In a study with 90 University students in Taiwan (aged 21–35 years), they argue that young people's overall belief in nature's ability to heal increased the strength of their nature connection at this time. Rios et al. (2021), in a study with children and young people (ages 4–13) in Portugal, show the participants' strong connection to nature, their exasperation about the pandemic and their longing for nature contact. They highlight, how the pandemic interfered with their participants' feeling of time, with some thinking that outdoor activities in pre-pandemic times had taken place during the previous school year even though they had actually only ended 1 month before. In Melbourne, it is argued that young people were particularly inclined to make use of 'dirt jumps' in public parks during lockdown, partly as a way of demonstrating their autonomy at a time when they otherwise had comparatively little control over their lives (O'Keefe, 2022). All these studies highlight the importance of context in shaping how nature became a well-being resource for young people in response to a range of pandemic challenges. Their findings emphasise the argument made by Kraftl et al. (2019) that simplistic frameworks for understanding children's and young people's nature (dis-) connections will not suffice and that we need to explore the complexities of how they actually encounter nature.

2.3 | Pandemic nature experience over time

While there is extensive evidence of the positive effects of nature experience on health and well-being during the pandemic, a core question is, whether these effects lead to longer lasting nature connections. Labib et al. (2022) emphasise the importance of the time of data collection in relation to the specific pandemic measures associated with particular periods. With most cross-sectional studies being conducted during early pandemic periods often characterised by local lockdowns, many studies found an interesting increase in nature contact at this time. For example, Grima et al. (2020) found an increase in the use of urban and peri-urban forests for people living in and around Burlington, Vermont, United States, at this time. Venter et al. (2020, p. 1) calculated a 291% increase in outdoor recreational activity during lockdown relative to a 3-year average in Oslo, Norway. Rousseau and Deschacht (2020, p. 1149) also found a positive shift towards public awareness of nature-related topics based on an analysis of online searches between 1 January 2019 and 11 May 2020 across Europe.

Turning to children and young people, in an online survey with parents conducted in the second quarter of 2020, Friedman et al. (2022) found an increase in nature connection for two-thirds of the children due to more time, increased enjoyment of nature and an elevated interest in it. In a study that combined story maps and surveys with young people before and during lockdown, Martz et al. (2022) also emphasise young people's dynamic relationship to nature, underlining their adaptability to changed circumstances, environments and needs. They also point to an increased awareness of nature benefits and fulfilment in nature contact. In contrast, in a quantitative survey-based study that asked those aged 10–18 in the second quarter of 2020 in the United States to compare the frequency of their outdoor activities before and during the pandemic, as well as changes in well-being, Jackson et al. (2021, p. 1) found a 64% decline in outdoor recreation and 52% decline in subjective well-being.

There are few longitudinal studies of young people's nature experiences over the course of the Covid-19 pandemic. This is no doubt partly because it will have been challenging enough to organise a snapshot study in response to changing and difficult circumstances for researchers and respondents alike. Venter et al.'s (2021) study is one exception as they extended their 2020 study (Venter et al., 2020) for a year to conclude that the increased use of nature spaces found in 2020 persisted in a way that suggested the pandemic had lasting positive effects on recreational patterns in Norway. It must be noted, however, that their study was on keen exercisers and may not therefore reflect the activity patterns of the total population. Early in the pandemic, Searle and Turnbull (2020) postulated that the resurgent appreciation of nature and nature spaces would be short-lived. The above studies suggest a more complicated picture, along with the importance of attending to how this varies across groups.

3 | THE PANDEMIC EXPERIENCE IN TYROL

The state of Tyrol, Austria, and its capital city, Innsbruck depend on tourists to whom claims are routinely made about the pleasures of 'Alpine-urban living' (Stadt Innsbruck 2022) or 'Alpine-urban joie de vivre' (Innsbruck Tourismus 2022) in the 'capital of the Alps' (Innsbruck Tourismus 2022). Innsbruck University is also the largest state employer and in its published list of answers to 'Why study at the University of Innsbruck?' the 'impressive natural scenery' (Universität Innsbruck 2022) comes top. It also underlines how 'the surrounding alpine huts, lakes or ski resorts it is usually only a stone's throw away' (Universität Innsbruck 2022). Innsbruck is a place where a particular way of benefiting from a particular kind of nature is central to how the city sees itself and attracts its students.

When the pandemic struck, and lockdown measures were implemented, this was a particular shock in view of how the freedom to experience Alpine nature was so locally valued. All 279 municipalities of Tyrol were put into quarantine from 19 March 2020

onwards—popularly referred to as 'hard lockdown' in a region experiencing some of the harshest pandemic measures in Europe. This was partly a result of 'super-spreader' events that made Tyrol of international concern in spring 2020. People were forbidden from leaving their homes except for basic supplies, medical care, going to work or caring for those in need. Walks were allowed, but they were to be short and only taken alone or with those from the same household within community borders (Land Tirol, 2023).

These regulations were slightly relaxed from mid-April 2020 and brought in line with restrictions in the other Austrian states. This allowed for more outdoor recreation such as taking a stroll or individual sports like running or cycling. However, the provincial government still appealed to the population to avoid activities in the mountains that risked injury (Land Tirol, 2023). All lockdown measures were eventually lifted at the beginning of June 2020. However, when the second wave of infections hits Europe in fall 2020, a second Austria-wide lockdown was implemented in November 2020.

4 | METHODS

Interested in how young people were coping with these challenges, in spring 2020, we circulated a call for participation to the University of Innsbruck students. Responses came from 12 Master and Diploma students in geography, psychology and organisation studies. As part of a co-production approach (cf. Arunkumar et al., 2019; Holt et al., 2019), these 12 then worked with us on the methods and focus for our explorative project, reaching out to participants that they then accompanied throughout the whole data collection phase and analysing the data. Recruitment involved snowball sampling through the networks of this team. The sample participating in the narrative writing consisted of 98 (64 female, 34 male) students aged between 18 and 29, with one being 36. These students were also invited to participate in the additional mobile instant messaging interviews (MIMIs), which 13 of them did.

The team ensured the project was suited to working remotely with young adults, taking account of the vulnerabilities they faced. Data collection took place completely online in line with existing social distancing requirements. We asked them to produce written narratives (cf. Marin & Shkreli, 2019; Vandebosch & Green, 2019) and we conducted MIMIs (cf. Bork-Hüffer, Kulcar, et al., 2021; Kaufmann et al., 2021; Kaufmann & Peil, 2020) with the participants throughout four data collection stages in 2020. The written narratives gave them time to structure, reflect and interpret their thoughts (Laughland-Booÿ et al., 2018) and to articulate the emotional and intimate experiences with their own words (cf. Yea, 2024). The aim of this was to give young people the freedom to decide which of their experiences and feelings they wanted to share and when. Participants received a written storytelling prompt for each narrative exercise in a Microsoft Word file. Narratives were then returned in a digitised form for analysis. The prompts encouraged students to write about their everyday

lives and practices during the pandemic. MIMIs, as a mobile media method, allowed the researchers to accompany and interact with the wider sample in real time (cf. Bork-Hüffer, Füller, et al., 2021; Kaufmann & Peil, 2020). MIMIs are whole-day interviews in which the researchers reach out to study participants via a mobile messenger in previously agreed time intervals, asking timely questions about their in situ spaces and practices. They provide participants the opportunity to share multimedia material by sending pictures, videos, voice messages, using emojis or GIFs to underline their messages (see Kaufmann et al., 2021, for a detailed description of the implementation of this method). Special attention was given to ensuring participants felt able to participate and counselling service contacts were provided in case they needed to turn to them. The research was approved by the University of Innsbruck's 'Board for Ethical Questions'. All participants received, signed and returned the written informed consent to us.

Three hundred and forty-one written narratives were submitted, ranging from one to four text pages. Furthermore, 44 MIMIs were conducted, which each covered a whole day (a weekday, in average from 8AM to 8PM) throughout which the research subjects were contacted at two hourly intervals through a mobile messenger app and interviewed about their concurrent activities and the spaces in which they take place. In this manner, we were able to appreciate how exactly their experience with different everyday spaces changed. Both methods were used over four data collection phases as follows:

1. Quarantine (Q: 1–7 April 2020; narratives: $n=98$, MIMIs: 13), 2–3 weeks after the start of regional quarantine—strict confinement to homes, 'hard lockdown',
2. Lockdown 1 (L1: 20–27 April 2020; narratives: $n=94$, MIMIs: 12), quarantine relaxations and adjustment to the nationwide lockdown measures,
3. Post-Lockdown (PL: 2–14 June 2020; narratives: $n=82$, MIMIs: 8), after lockdown measures were lifted,
4. Lockdown 2 (L2: 16–27 November 2020; narratives: $n=67$, MIMIs: 11), second nationwide lockdown.

Crucially for this paper, this work did not set out to learn about nature connections or outdoor activities (see [Supplementary Material](#) for questions of the prompts). These did, however, emerge as topics of significant interest to our students. Inductive content analysis (cf. Mayring, 2013; Vandebosch & Green, 2019) revealed the relevance of nature connections in the first place, which was followed by frequency analysis (Dammann et al., 2021) of the narratives to note patterns in references to nature and outdoor spaces, with particular attention to how things changed between the four data collection phases. Then, we turned to qualitative narrative analysis following Kuper and Mustanski (2014) to deepen our understanding of the effects of the broader political context (here especially pandemic measures), the social context (social and family relations) and the physical environment. For all data analysis, MaxQDA software was used.

5 | RESULTS

5.1 | An overview of changing nature connections

The frequency analysis revealed the importance of a variety of nature and outdoor spaces and activities, both those our respondents took part in or those they imagined and longed for. When explaining their activities or imaginations, students often referred to either 'the mountains' more generally or features such as alpine pastures, forests, meadows and Alpine huts. Many talked about activities they did or longed for in the mountains nearby Innsbruck such as going for a walk, running, hiking, climbing, biking, mountain biking and skiing. Urban nature spaces in Innsbruck meanwhile were seldom mentioned. It was clear that they were mostly craving (activities in) the mountains. [Figure 1](#) shows the average number of 'nature related' terms across the four data collection phases in 2020.

What could we take away from this initial analysis? First, it was during the quarantine periods that ideas of nature were most discussed when students were asked to consider how they were coping with extended periods of confinement. Although, as discussed, local urban green and blue spaces (UGBS) were acknowledged as a source of stress relieving support, our participants were clearly thinking much more about the mountains and the things they could do there. Often, they could see these mountains in the distance from the windows or balconies of their flats or gardens (see [Figure 2](#)). In that sense, they were not so far away which may have made it easier to imagine venturing there. When taking on the challenge of returning with quarantine restrictions relaxed during the period of lockdown 1 (L1), this was a source of some interest and excitement. When restrictions were fully lifted (PL: post-lockdown), they spoke more of the weather conditions because those posed the only constraining factors to going back out there on the mountains. In this way, the mountain connection was arguably constant—it just morphed from a (mostly) imagined link to actual experience.

5.2 | Grieving the loss of mountains and mountain sports

In order to contextualise the results presented in this chart, we then turned to qualitative analysis. When the quarantine measures were still active, students deeply grieved lost nature connections and missed the opportunity to do mountain outdoor sports. Many participants underlined the negative psychological and physical effects of not being able to go out, of lacking opportunities for movement and of relaxing in nature and outdoor spaces. Yet, for some, nature connections were not only important for well-being but also an intrinsic part of their self-identification and identities.

Nele's narrative serves as an illustration here. Nele, a 23-year-old law student, temporarily (only during the quarantine) moved back from an apartment she shared with one flatmate in Innsbruck to her family home, who had a home with a garden in another Tyrolean community. With her mother working as a nurse, she particularly

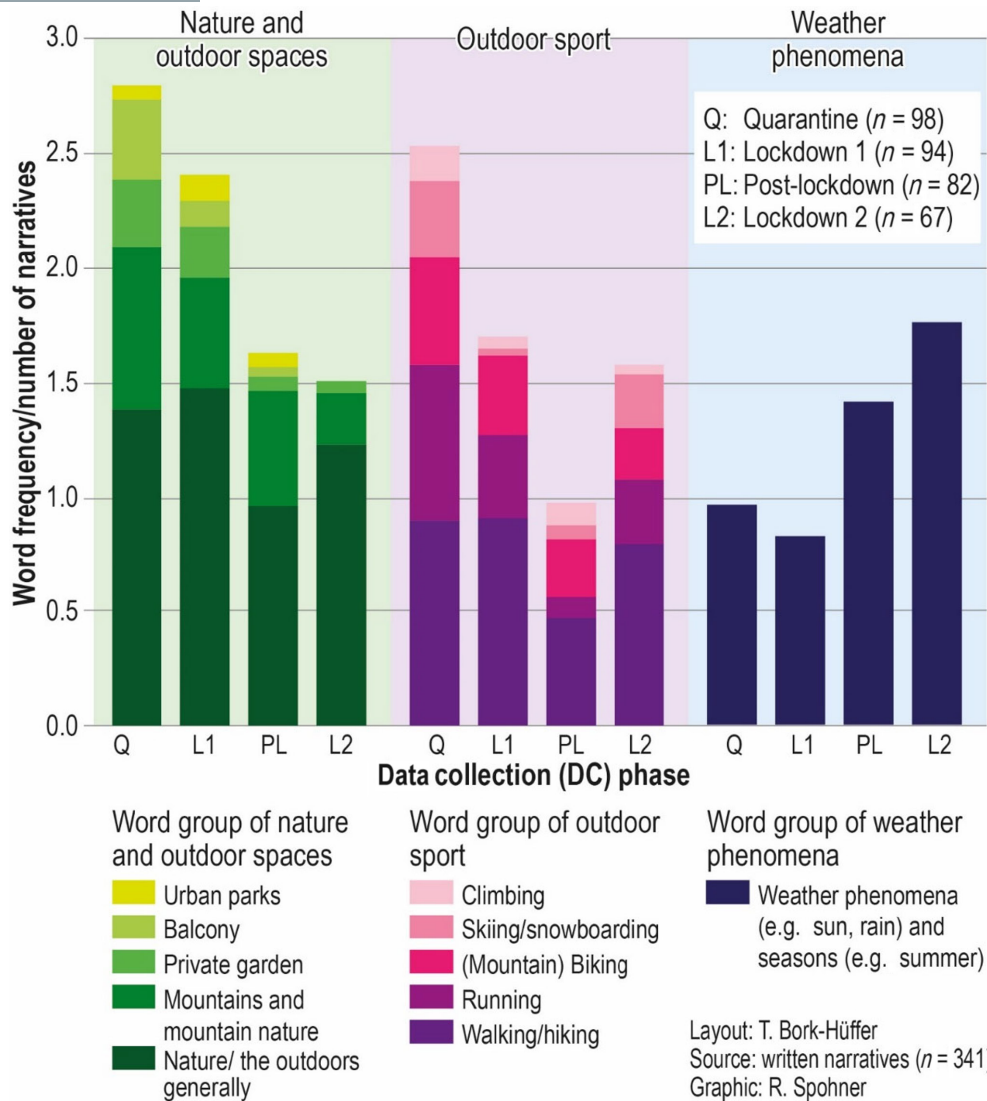


FIGURE 1 Analysis of word frequencies in the narratives (divided into three word groups).



FIGURE 2 A student enjoying the mountains from her balcony (MIMI chat protocol, Lucy, Q1). Pseudonyms are used to protect all participants.

worried about spreading the virus when, in a similar way to other students in our sample, she organised her life around mountain outdoor sport activities:

'My life has changed very drastically. [...] I am a very, very sporty person, used to do competitive sports and daily sports is quite normal for me. Normally I can be found on the mountain bike, on the road bike, running, with touring skis, etc. [...] for someone like me, there's still nothing worse than having to stay home in the nicest weather. Because normally I would only be found on the mountain on days like this...'

(Nele, quarantine)

Many others felt the same. 23-year-old Amelie complained that '[s]itting inside in the beautiful weather [...] instead of being on the slopes is a real torture.' Alexander wrote that '[e]specially when I look at the Nordkette [Karwendel mountain range] with cloudless skies and warm temperatures, I miss the freedom, to choose a peak or a hut and just go there.' (22 years old, quarantine1).

In summary, at the start of the restrictions, Nele and others did not merely miss the mountains and the outdoor sports they did

there. Rather, she underlines that mountain outdoor sports are 'such an integral part of my life that I don't want to do without unless it's specifically forbidden.' (lockdown 1). Our participants were especially unsettled by the local lockdown. This was clearly because they felt deeply rooted in, and strongly identified with, the nearby mountains and Alpine nature activities.

5.3 | Returning to the mountains

Their attachment to the mountains was such that some breached quarantine restrictions to go there. More of them, however, waited until the relaxation of quarantine measures in lockdown 1. Either way, our students celebrated the opportunity to return to the mountains when it arrived.

Sarah's account serves as another good illustration in this respect. For Sarah, a 25-year old psychology student, the pandemic and the particularly strict quarantine imposed in Tyrol stirred anxieties about being deprived of the mountains: 'When I heard that there was a curfew, I was shocked. [...] That would be the horror for me, because I really like to go out in the fresh air for a walk along the Inn or for a more strenuous walk to the Höttinger Bild [pilgrimage chapel, located at 905m above sea level on the slope of the Nordkette mountain range above Innsbruck].' (quarantine). But she need not worry so much. In Sarah's case, the experience of the quarantine led her to establish a new daily pandemic hiking routine: 'What I always notice is that every day is similar. I get up around 8, then go to the Höttinger Bild, which is very good for me, and sometimes do some sports exercises afterwards.' (quarantine). She maintained this routine that made her feel 'very balanced, both physically and mentally' (lockdown 1) until lockdown lift in June.

She underlines how much she enjoyed these nature encounters with all her senses: 'Today it has also finally rained, yay! I think I have never felt so connected with nature as is currently the case. There is nothing more beautiful for me than to walk in the forest to the Höttinger Bild and breathe in the forest smell-marvellous.' (lockdown 1). Some highlighted sensual experiences through smelling, hearing or feeling nature. Luisa (22, quarantine), for example, during DC1 described how: 'at the moment I'm totally happy, even if I'm only walking for a few minutes, when the sun is shining and the birds are chirping'. Isabella (22, lockdown 1) expressed how she was 'overwhelmed by the beautiful season and the gorgeous weather!' when re-venturing into nature during lockdown 1. Overall, these results help us to contextualise the results of Figure 1 in terms of how exactly 'mountain nature', and the outdoors were celebrated, particularly during the early pandemic in spring and early summer 2020.

Nature contact outside the pandemic city also allowed students to forget the uncertainties, stresses and fears associated with the cities in which the virus might be more easily passed on. After starting to go out again in lockdown 1 with relaxed restrictions, Ben wrote that '[m]ountain sports let me forget the situation



FIGURE 3 A student's snapshot of the pandemic city, which was giving her a 'weird' feeling of surveillance and control with the much longed for mountains in the back (MIMI chat protocol, Stella, quarantine).

quite well, because on the mountain you often have the feeling that the world is still all right.' By contrast, the streets and parks of Innsbruck were experienced as 'extinct and empty' (Helena, 22, quarantine), 'weird' (Stella, 25, quarantine, see Figure 3) or 'strange' (Jana, 24, lockdown 1). It was nature spaces, particularly the mountains, the rural and generally the 'outside' that were both, imagined and experienced, as 'a great release to get free from the city' (Amalia, 21, lockdown 1), or as making the pandemic at least 'bearable' (Chiara, quarantine). This nature was especially valued precisely because it was 'away' since what was nearby was still part of a newly strange urban environment in which infection risk remained and social life was far from normal.

5.4 | Nature is blended back in

The frequency analysis shows a significant decrease in references to nature, outdoor spaces and outdoor sports in our final waves of student journaling—during post-lockdown and lockdown 2—even though they could then make use of them again. Accounts returned to more prosaic and practical matters now as they spoke of the current weather situation and how it affects their possibility to go out. During our November data collection (lockdown 2), the weather was sunny and warm, and several participants pointed out how these conditions helped them to practise their favourite

sports—mostly hiking, biking, running or walking in the mountains. The narratives reflect how nature experiences and outdoor sports had returned to being a blended in normal and natural part of everyday life.

Going back to the accounts of Nele and Sarah, we see this for them too. Despite the importance of mountain sports to her, when restrictions were lifted, Nele no longer mentions sports, outdoor or nature activities. Also, during the second lockdown in November 2020, outdoor sports are much lesser a topic in her narrative. She only mentions the relief of being able to continue her sports activities in nature: 'Regarding sports: I don't go to the gym, otherwise I only do outdoor sports, which I can fortunately continue to do. [...]' (lockdown 2). This related to a striking pattern found in almost all our narratives, which had underlined the importance of the mountains and outdoor sports: These students talked a great deal about them during quarantine but not afterwards. For Sarah, nature encounters lost their magic with the lifting lockdown, despite her hope in lockdown 1 that she 'will be able to integrate the peace I have gained into everyday life and not fall back into old patterns..., i.e., [... to] take time to read and continue to get out into the fresh air a lot.'. Although she did not know why she had somehow lost her outdoor pandemic routine that took her to favourite mountain spot that gave her 'great peace'. During the second lockdown in November 2020, she still did more outdoor activities than before the pandemic, but was 'much less motivated', although her walks still provided her with some 'balance'.

In the previous period, Alpine nature represented the place where 'the world is still ok'. Now, however, as the strict pandemic measures disappeared so too did the students' reflexive engagement with the restorative value of thinking about the mountains. Arguably, their connection to nature weakened at this time in the sense that these students were back doing their activities with less explicit sense of how being away in the mountains could help them feel better by putting the challenges of city life into perspective. Having said that, we might equally contend that they were now too busy enjoying the benefits of doing sports in the mountains to have the time or inclination to actively reflect on, and write about, how important they were to them.

6 | DISCUSSION AND CONCLUSIONS

As Maddrell (2020, p. 107) noted early on in the pandemic, Covid-19 'has generated varied forms of loss and consolation' with nature being linked to both a sense of loss when it became inaccessible but also a source of 'comfort, reassurance, solace, and resilience' when people could use it (p. 109). Our findings largely support this claim, while also giving depth to the contextualities of the emotional connections involved. In this respect, our case exemplifies the value of studying how nature becomes a well-being resource during stressful times like the pandemic with reference to the socio-cultural, socio-political and local environmental contexts that produce them. The stringent Tyrolean regulations meant severe disruption to the freedoms and outdoor activities of the young people we worked with

there and they particularly felt this because of their strong personal identification with the local mountain nature. In that respect, on one level, ours is a fairly straightforward story of how ideas of, and experiences with, nature evolved for this group during the pandemic. Still, our findings encourage us to end by emphasising the importance of three issues, both for understanding nature connections during challenging times and how, and whether, they might be promoted more generally.

6.1 | Place

We recognise that we undertook our study in quite a specific place. As we have highlighted, Tyrol, Innsbruck and the university there all routinely celebrate the pleasures of spending time in the mountains nearby. In that sense, our results are perhaps unsurprising—those attracted to a university in the Alps missed being in the nearby mountains during lockdown. But all places are specific, and they can benefit from being studied in ways that centre this specificity. Many of our participants had a very strong identification and connection with the local mountain nature. In this respect, we wonder about the place-specific notions, identities and practices that young people and others have built around nature in other settings. Policies based on beliefs about the importance of urban greenspace made sense during the pandemic. But they also often tapped into and reproduced a relatively place-indifferent vision of cities (cf. Martínez & Short, 2021; Rose-Redwood et al., 2020) whose inhabitants might be encouraged to benefit from particular local spaces. If we had asked them about urban nature spaces, our participants could, no doubt, have given us answers. But our study also showed that spaces nearby were not only not their main focus in turning to nature during Covid but also that the mountain nature was especially valued precisely because it was apart from the strange new pandemic city (cf. also Kaufmann et al., 2020). This leads us to wonder what other types of nature and natural resources, from actual to virtual experiences online, to television show depicting nature, watery environments, even the idea of future adventures, might be particularly important for young people elsewhere at this time since, though this population can sometimes be discussed and studied as such, it is not of a piece. In any case, the results of our open-ended exploration suggest the potential for addressing local populations, in crisis situations—pandemic or other—, in terms that resonate with their place-specific relations to and identification with local nature. Ideally future policies and communications are born of this kind of contextual sensitivity. In our study, rather than fixating on city parks, we think a better policy response to shocks like the pandemic might have been to encourage people to enjoy the mountains, either practically while respecting social distancing provisions or imaginatively by reminding them that the mountains, where the 'world is alright' will always be waiting. This could have been more effective than telling them to go to nearby urban parks within community borders for short periods and make the most of that.

6.2 | Time

We note how positive reactions to recaptured nature contact—at least as revealed through our narrative data analysis—faded quickly during summer 2020. There were very few indications here of a continued awareness and elevated 'sense of nature' that persisted after restrictions lifted. What does this say more broadly? We think it emphasises the (temporary) importance of these particular relationships in crisis situations. This resonates with Searle and Turnbull's (2020) postulation that the resurgence in nature interest witnessed during the early pandemic will not automatically translate into more caring and sustainable nature practices (as, for instance, suggested by Collins et al., 2023). In terms of Covid-19 specifically, our study therefore emphasises the need for contextualising pandemic research in terms of 'crisis temporalities', which is about taking an open approach to the entanglements, non-linearities and 'ongoingness of crisis from the past, the present, and into the future' (Brickell, Lawreniuk, et al., 2024, p. 2). More broadly, our study also suggests the value of attending to how exactly nature attachments wax and wane in everyday life. Further work on this topic might hold the key to positively influencing change by virtue of recognising that change is always already happening. In this respect, it is interesting to note that senses of connection seemed strongest for our students precisely when they were unable to respond to these feelings by going up into the mountains. For those hoping to promote nature benefits to wider populations then, the challenge could be seen as one of about 'catching' people when they have the time and inclination to think about these matters.

6.3 | Method

This leads us finally to the methods used in studies on nature connections during pandemics and more generally. The approaches taken by other studies on these connections under Covid-19 span online quantitative surveys, qualitative interviews, online focus groups and story maps to the analysis of online search behaviour related to nature and the scraping of mobile tracking data produced by outdoor activity. Our longitudinal study suggests these findings can benefit from being contextualised in terms of when data were collected, local pandemic measures at that time and where different social groups are in their pandemic journeys. In that respect, our study suggests the power of longitudinal research (cf. Brickell, Chhom, et al., 2024; Brickell, Lawreniuk, et al., 2024) that integrates inductive and explorative elements to reveal previously unexpected insights.

Overall, our study underlines the importance of considering context and temporalities in research on nature connections and the value of inductive and longitudinal research in this regard. We have discussed this here with reference to how young people handled the Covid-19 restrictions in Innsbruck. But such an approach can also sensitise us to the potentially surprising ways in which the idea and actuality of nature experience may be drawn on by a whole range of

groups in response to the various challenges thrown at them as they are drawn in and out of different patterns of everyday living. In that sense, we end by underlining the value of noticing, and responding to, how people are themselves making the (nature) connection. Our study never set to study this topic, but we feel we have learnt something useful about it partly because of exactly that.

AUTHOR CONTRIBUTIONS

Tabea Bork-Hüffer and Russell Hitchings were involved in conceptualisation; Tabea Bork-Hüffer was involved in methodology; Tabea Bork-Hüffer and Leonie Wächter were responsible for analysis, investigation, data curation; Tabea Bork-Hüffer, Russell Hitchings and Leonie Wächter were involved in writing—original draft preparation, review & editing; Tabea Bork-Hüffer was involved in project administration, funding acquisition, resources and visualisation.

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CONFLICT OF INTEREST STATEMENT

There is not conflict of interest.

DATA AVAILABILITY STATEMENT

The project produced qualitative textual, visual and multimedia data. The data sets are highly sensitive as they include rich personal and deep accounts of students' situatedness in the pandemic. Thus, the original data cannot be made available publicly.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

Supplementary Material S1. First story telling prompt of the narrative exercise (quarantine).

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